



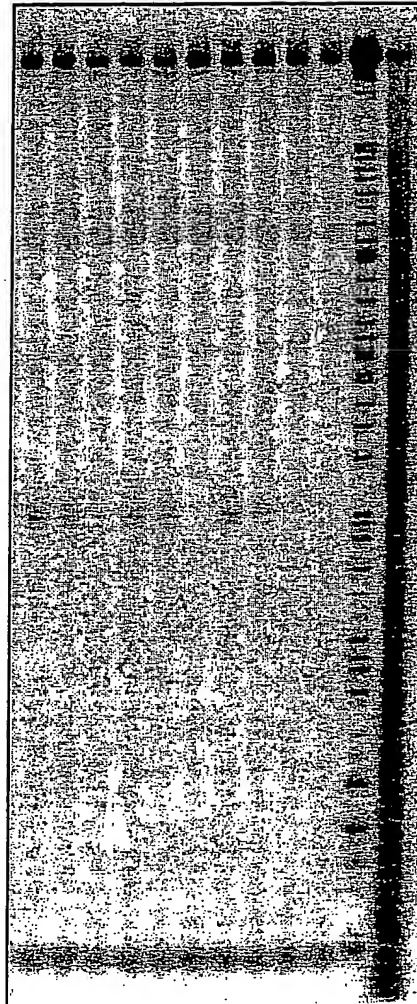
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Martinez et al. Figure 2

**A****B**

s 3' 3' 3' - - - 5' 5' 5'

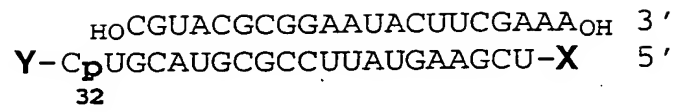
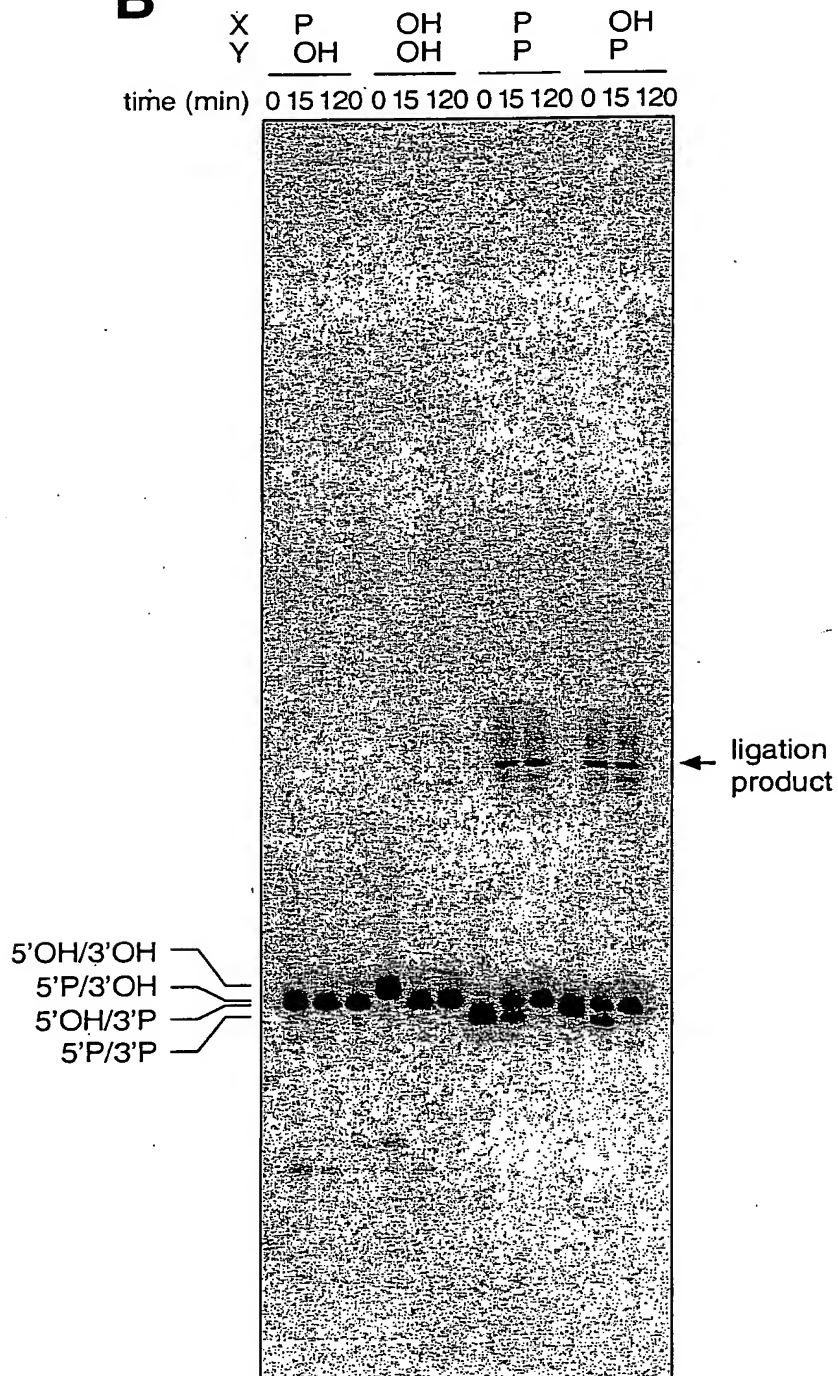
as 3' - 5' 3' - 5' 3' - 5' NCT1OH





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Martinez et al. Figure 3

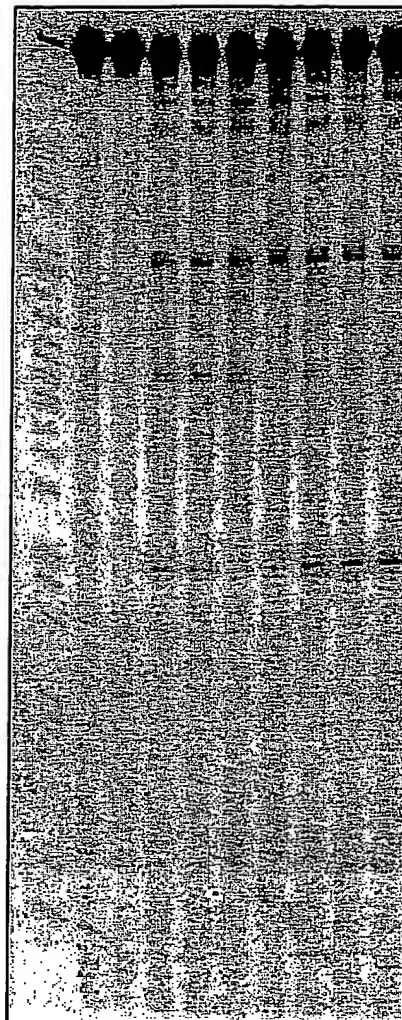
**A****B**



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Martinez et al. Figure 4

		time point of competitor siRNA addition (min)		0		15					
											
siRNA duplexes	competitor (nM)	100	0	0	1000	10	1000				
	specific (nM)	0	100	← 10 →							
HeLa S100		T1	-	-	+	+	+	+	+	+	+

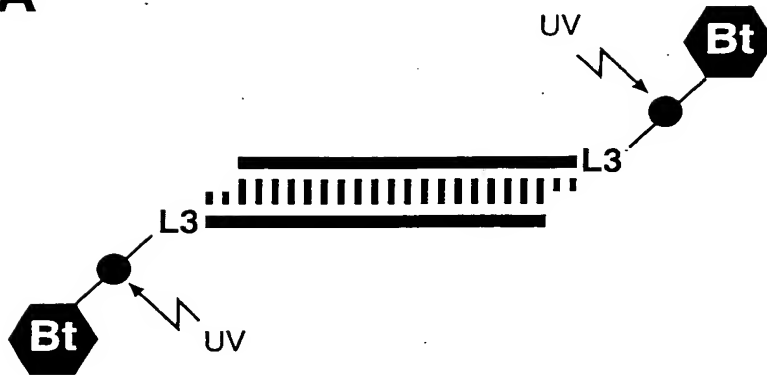




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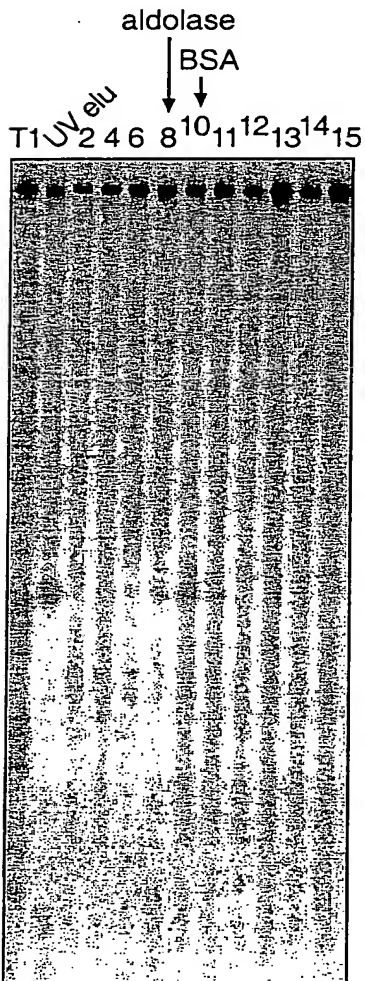
Martinez et al. Figure 5

**A**



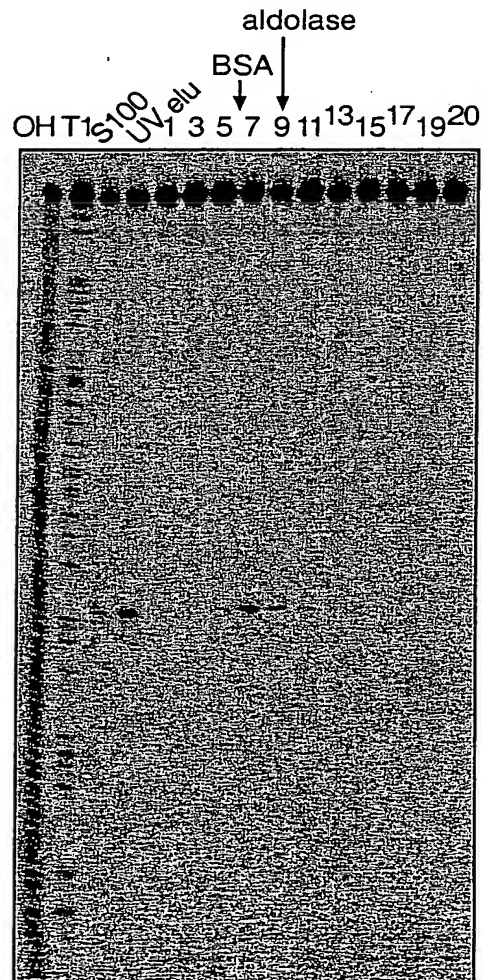
**B**

Superdex 200



**C**

glycerol gradient 5-20%

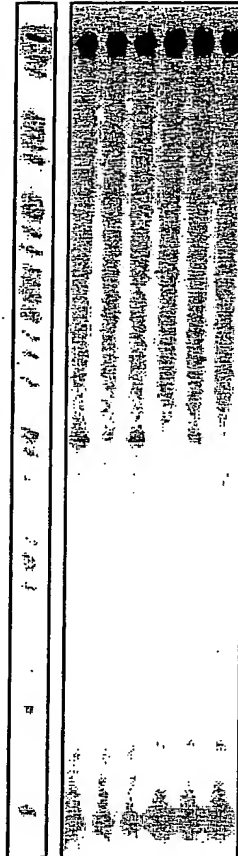




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Martinez et al. Figure 6

		UV	flow-
		eluate	through
s-Biotin		+	+
as-Biotin	T1	+	+





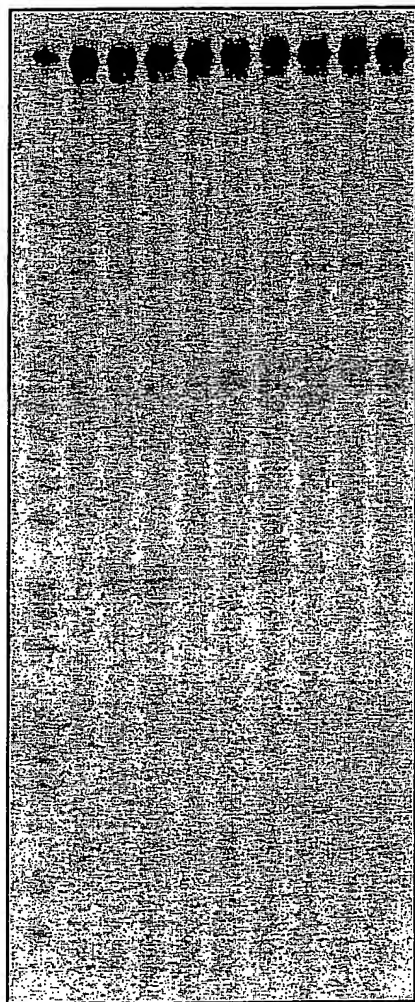
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Martinez et al. Figure 7

**A**

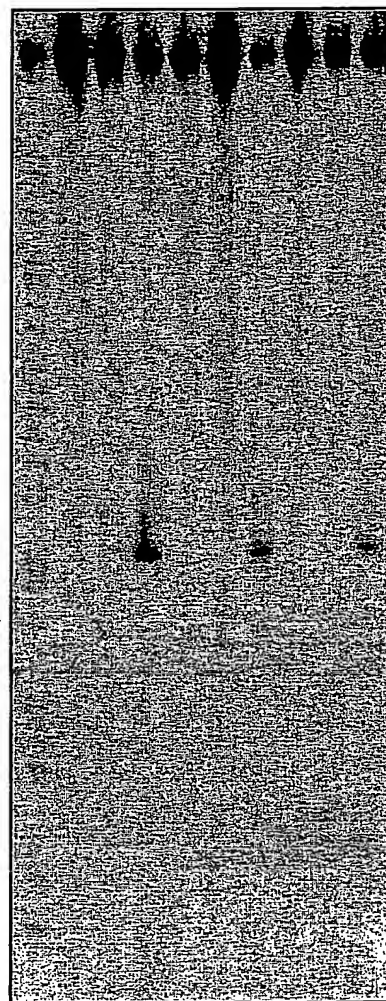
HeLa S100

c (nM)	100			10			1		
siRNA	T1	s	as ds	s	as ds	s	as ds	s	as ds

**B**

Drosophila embryo

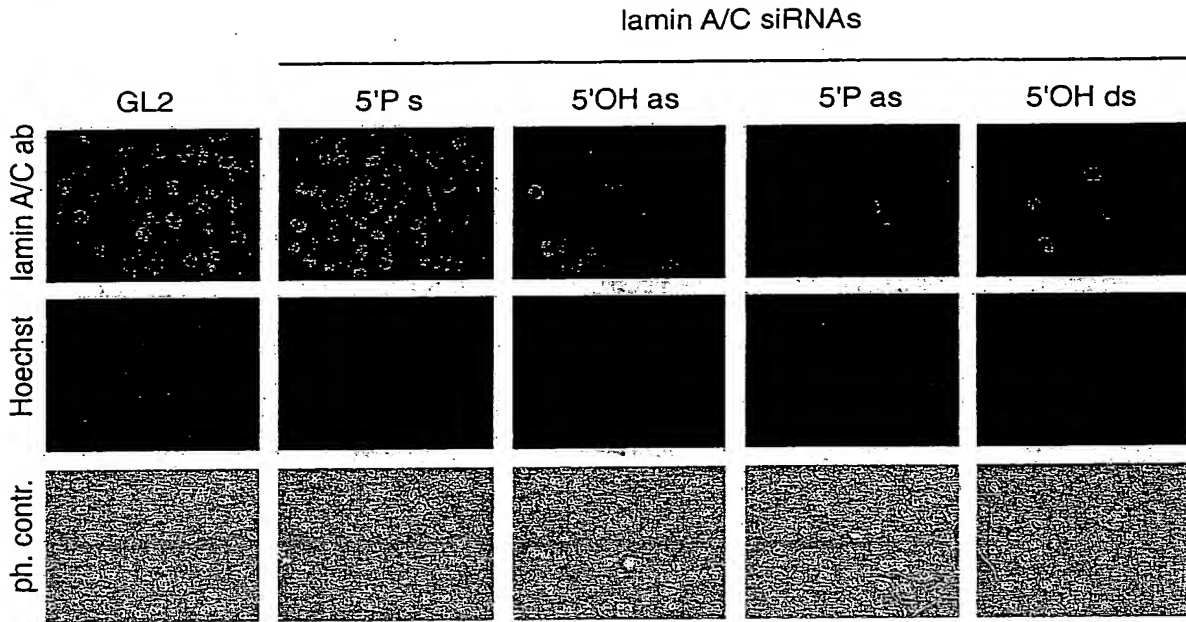
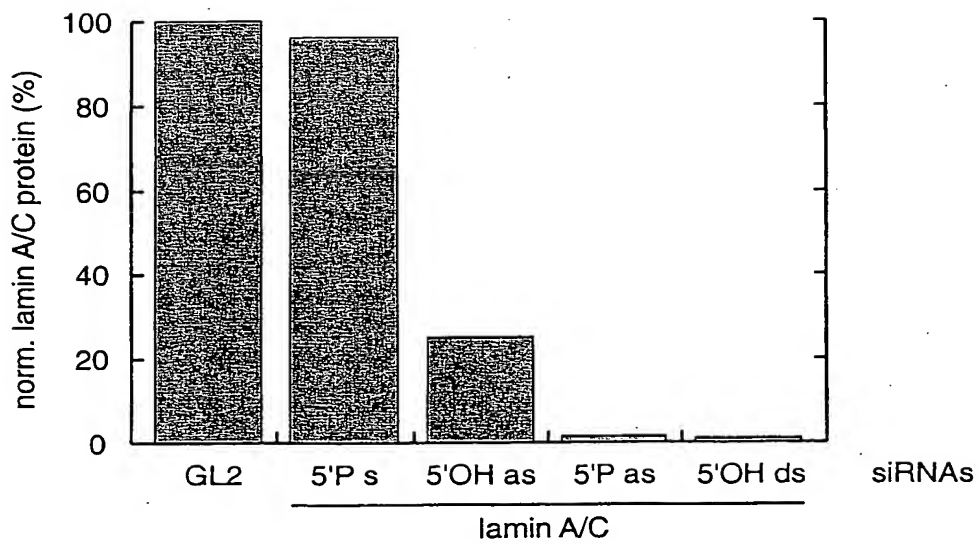
c (nM)	100			10			1		
siRNA	T1	s	as ds	s	as ds	s	as ds	s	as ds





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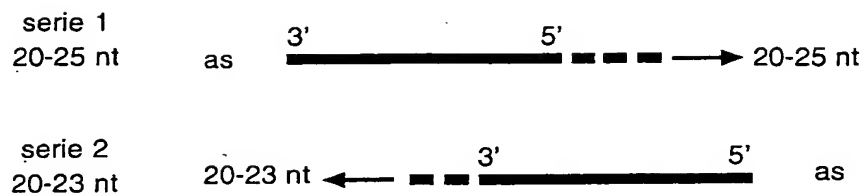
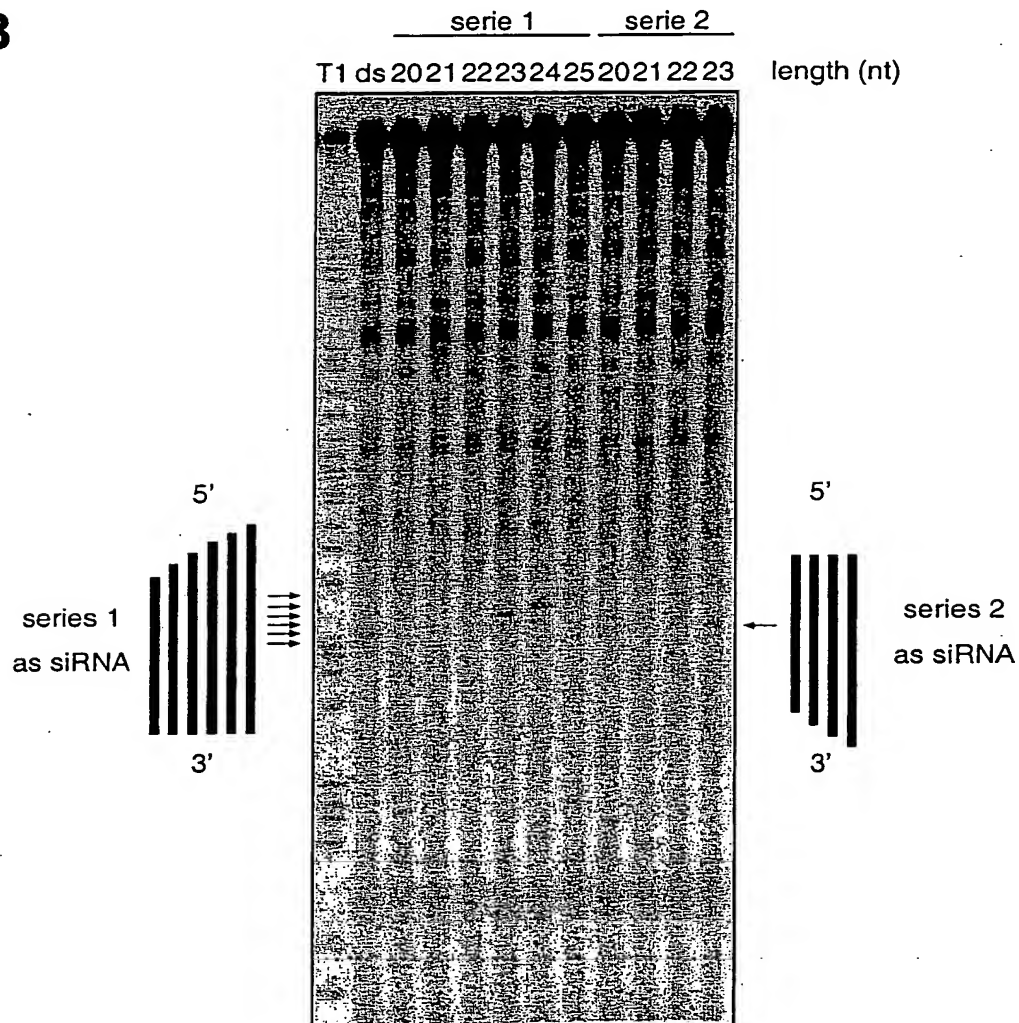
Martinez et al. Figure 8

**A****B**



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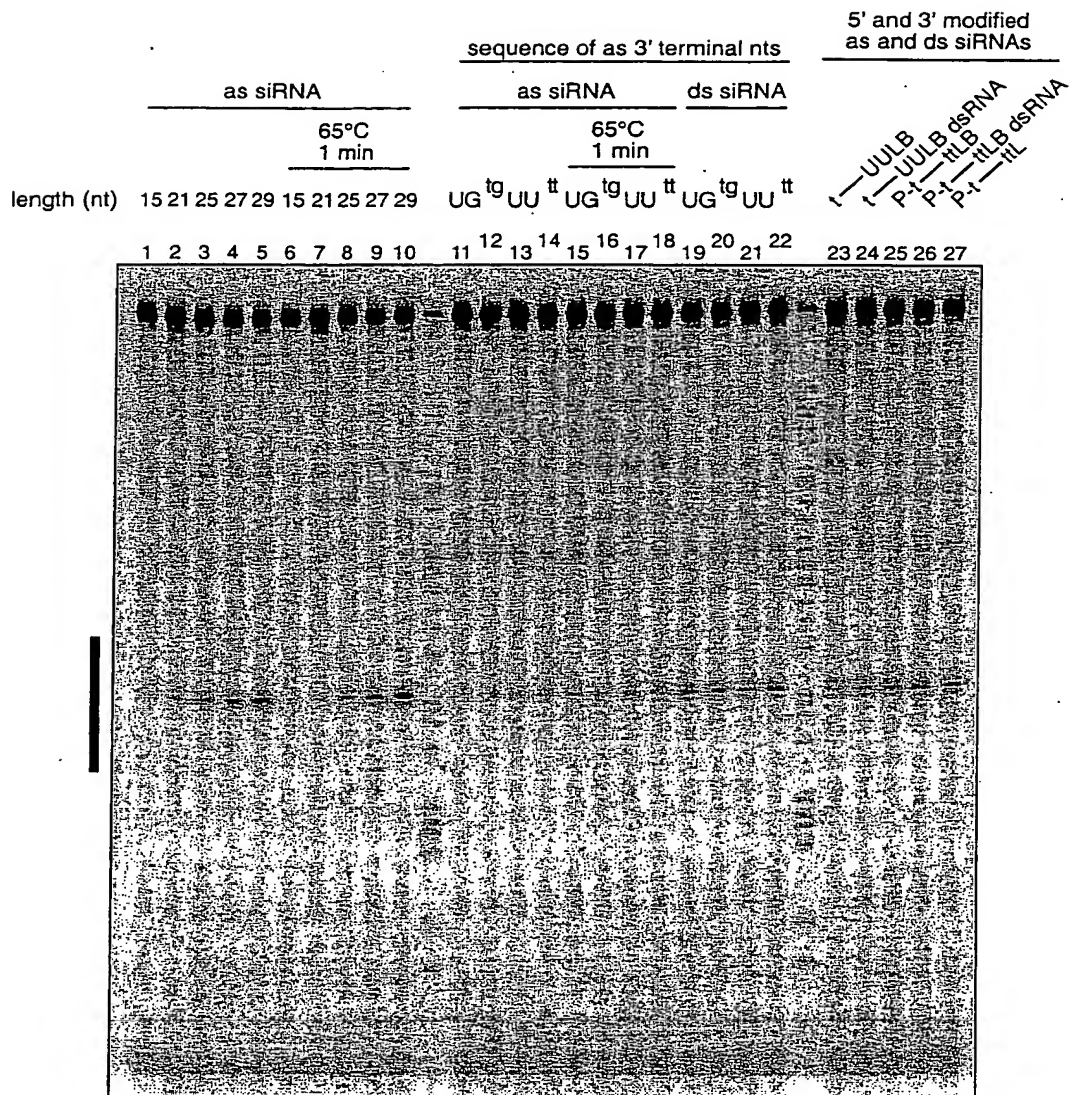
Martinez et al., Figure 9

**A****B**



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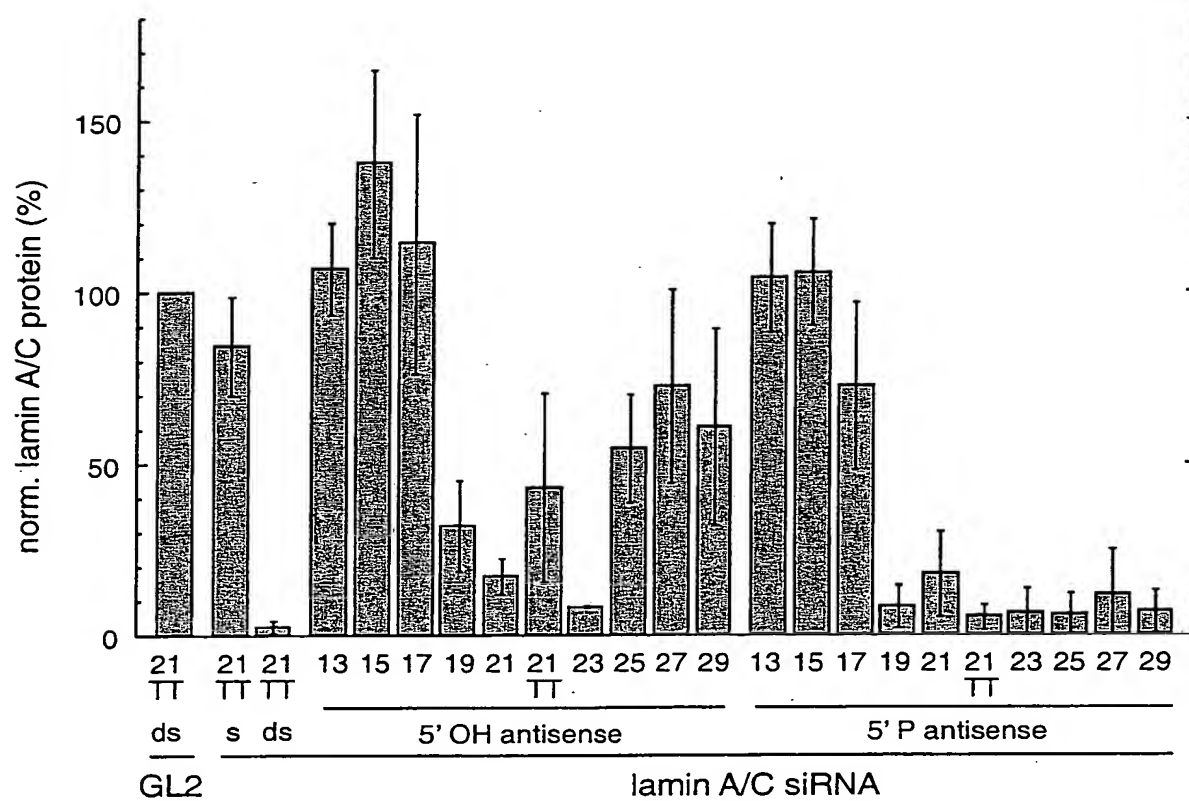
Martinez et al., Figure 10





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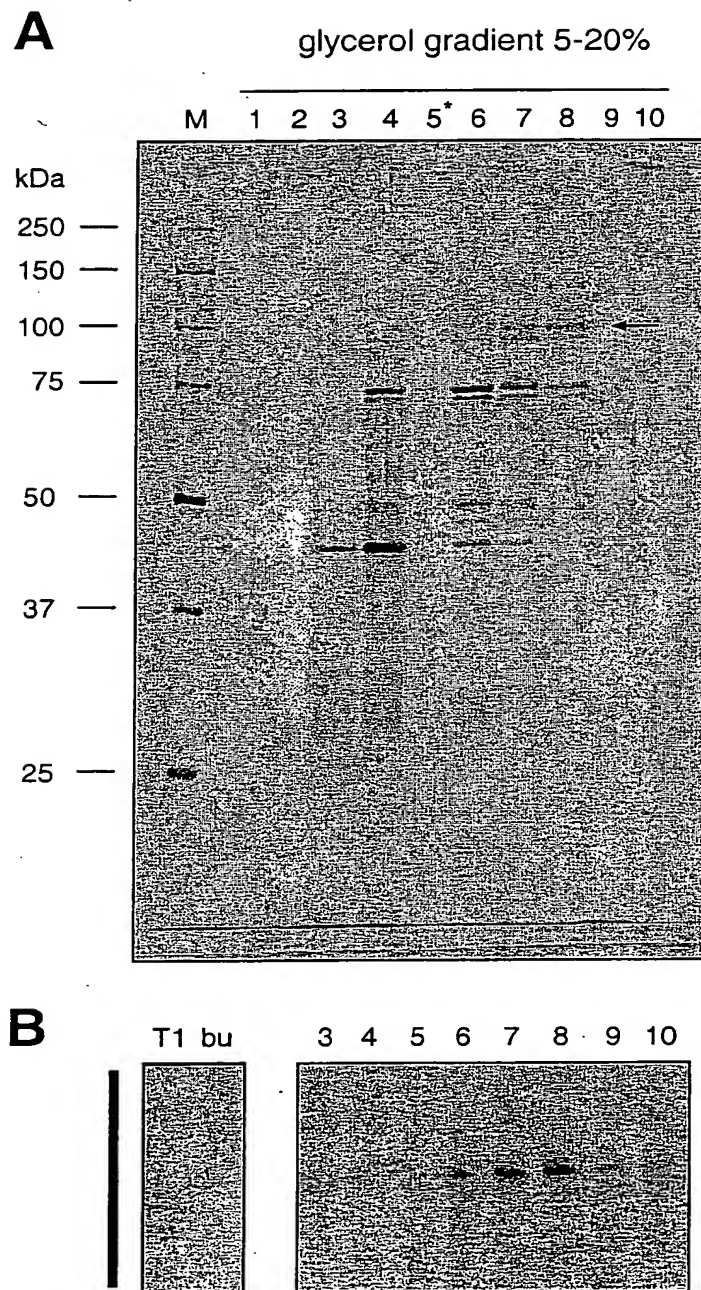
Martinez et al. Figure 11





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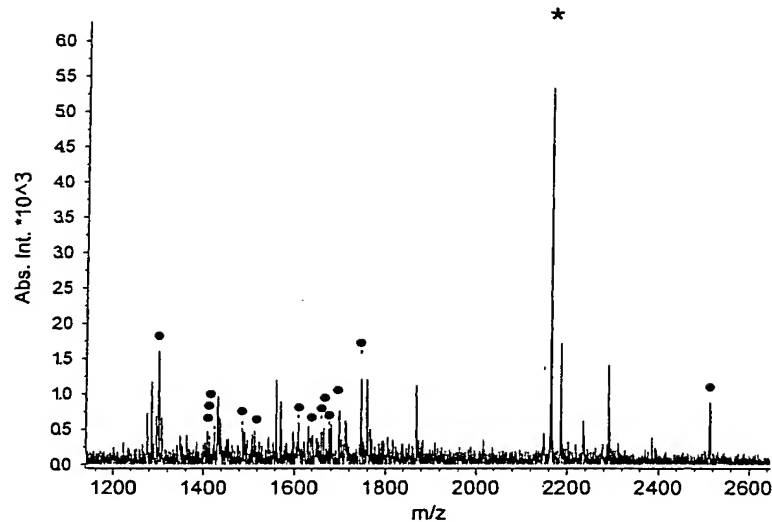
Martinez et al. Figure 12





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Martinez et al. Figure 13 A

**A**

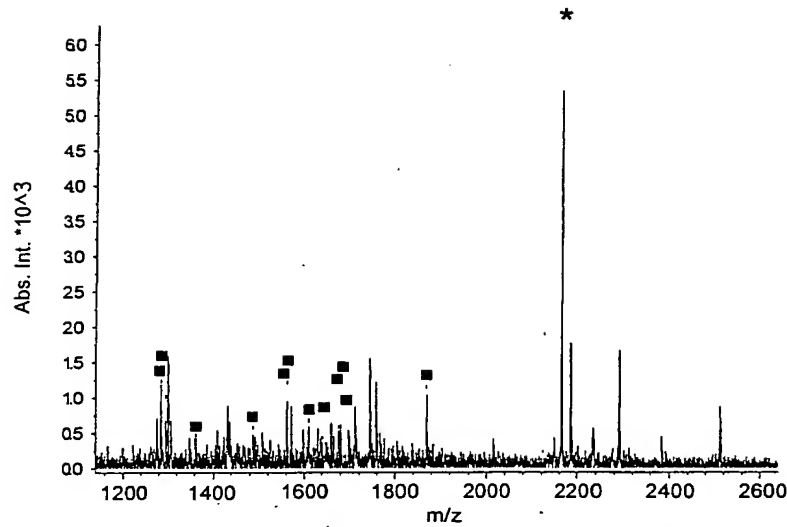
eukaryotic translation initiation factor 2C2

Observed	Mr (expt)	Mr (calc)	Delta	Position	Miss	Peptide
1299.67	1298.67	1298.73	-0.07	413 - 424	0	VLQPPSILYGGR
1402.64	1401.64	1401.74	-0.10	637 - 648	0	QEIIQDLAAMVR Oxidation(M)
1413.62	1412.61	1412.73	-0.12	169 - 180	1	HLPSMRYTFVGR
1423.60	1422.59	1422.71	-0.12	356 - 367	1	KLTDNQTSTMIR Oxidation(M)
1486.56	1485.56	1485.66	-0.10	495 - 507	0	YAQGADSVPEPMFR Oxidation(M)
1513.71	1512.70	1512.80	-0.10	112 - 125	1	DKVELEVTLPGECK
1608.67	1607.66	1607.69	-0.03	481 - 494	0	DAGMPIQGQPCFCK
1635.84	1634.83	1634.85	-0.02	85 - 98	1	TQIFGDRKPVFDGR
1658.85	1657.85	1657.84	0.01	368 - 382	2	ATARSAPDRQEEISK
1663.85	1662.85	1662.91	-0.06	698 - 711	1	DYQPGITFIVVQKR
1675.79	1674.78	1674.84	-0.06	372 - 385	2	SAPDRQEEISKLMR Oxidation(M)
1696.77	1695.76	1695.84	-0.08	323 - 336	0	YPHLFCLQVGQEQK
1743.75	1742.74	1742.77	-0.03	181 - 197	0	SFFTASEGCSNPLGGGR
2511.07	2510.06	2510.12	-0.05	816 - 838	1	YHLVDKEHDSAEGSHTSGQSNR



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Martinez et al. Figure 13 B

**B**

eukaryotic translation initiation factor 2C1

Observed	Mr (expt)	Mr (calc)	Delta	Position	Miss	Peptide
1283.66	1282.65	1282.74	-0.09	410 - 421	0	VLPAPILQYGGR
1294.65	1293.64	1293.67	-0.03	794 - 805	0	SVSIPAPAYYAR
1361.61	1360.60	1360.70	-0.10	553 - 564	0	TSPQTLNLCCK
1486.56	1485.56	1485.66	-0.10	492 - 504	0	YAQGADSVEPMFR Oxidation (M)
1560.76	1559.75	1559.83	-0.08	97 - 110	0	NIYTVTALPIGNER
1561.76	1560.75	1560.78	-0.02	111 - 124	1	VDFEVTIPGEGKDR
1608.67	1607.66	1607.69	-0.03	478 - 491	0	DAGMPIQGQPCFCK
1640.74	1639.73	1639.82	-0.08	240 - 253	0	NIDEQPKPLTDSQR
1675.79	1674.78	1674.84	-0.06	369 - 382	2	SAPDROEEISRLMK Oxidation (M)
1679.86	1678.85	1678.90	-0.05	695 - 708	1	DYQPGITYIVVQKR
1696.77	1695.76	1695.84	-0.08	320 - 333	0	YPHLPCLQVGQEQK
1867.85	1866.85	1866.87	-0.02	178 - 194	0	SFFSPPEGYYHPLGGGR



C

eIF2C2	MGVTSKPKPAFAHSEPPPGGVAFFPFPAPDFGTGGRRIKLQANFFRMIDIPKIDTYHTELDIKPKKCPRRVNRREVEHNVQHFKEQIFGDRKPVVDGGRKH	100
eIF2C1	--MEAGESGAAGAYHPPGQGVTONPRPFGIGTGGRRIKLQANFFRMIDIPKIDTYHTEVDIKPKKCPRRVNRREVEHNVQHFKEQIFGDRKPVVDGGRKH	97
	1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100	
eIF2C2	HYTANGLPICGRNVELEVTFEGEGKDRIFKVSIRKMSVSCNHLHDLSCGRDEVPFETFOALDVVAKHLSMRYTFVGRSFTFAEGGSSHPGGGGRVW	200
eIF2C1	HYTANGLPICGRNVELEVTFEGEGKDRIFKVSIRKMSVSCNHLHDLSCGRDEVPFETFOALDVVAKHLSMRYTFVGRSFTFAEGGSSHPGGGGRVW	197
	.....110.....120.....130.....140.....150.....160.....170.....180.....190.....200	
eIF2C2	FGFHQSVRPSHMDMDLHIDVSATAFYKAQFVIEFCEVLDFFKHEEQKPLTDSQRVETKEIKGLKVEITHCGGMKKKXRVCHVTRPASHQTFFLQGE	300
eIF2C1	FGFHQSVRPSHMDMDLHIDVSATAFYKAQFVIEFCEVLDFFKHEEQKPLTDSQRVETKEIKGLKVEITHCGGMKKKXRVCHVTRPASHQTFFLQGE	297
	.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300	
eIF2C2	SGQTVECTVAQYFADKRLQLRYPHLPCLQVGGQEKHTYLPLEVCNIVAGQRCIKLTDNQTSTMIKATARSAPDRQNEISLMMHAGSTNDPFTYHFGI	400
eIF2C1	SGQTVECTVAQYFADKRLQLRYPHLPCLQVGGQEKHTYLPLEVCNIVAGQRCIKLTDNQTSTMIKATARSAPDRQNEISLMMHAGSTNDPFTYHFGI	397
	.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400	
eIF2C2	HVKEDNTSVTGRVLQFSLHNGGRHAIATFPGGVWDMRSGQFVHGEIKVWAIACFAPQKCHLKLKFTDQLRKISDAGMFIQQQPCCKYAQGD	500
eIF2C1	HVKEDNTSVTGRVLQFSLHNGGRHAIATFPGGVWDMRSGQFVHGEIKVWAIACFAPQKCHLKLKFTDQLRKISDAGMFIQQQPCCKYAQGD	497
	.....410.....420.....430.....440.....450.....460.....470.....480.....490.....500	
eIF2C2	SVEPMFRHLKNTYSGLQLVYVILPGKTFVYAEVRVGDTELGMAQCQVQKRVQETPQTLSENLCIKINVLGGNNILDPQGRFVTVQQPFVFLGADVT	600
eIF2C1	SVEPMFRHLKNTYSGLQLVYVILPGKTFVYAEVRVGDTELGMAQCQVQKRVQETPQTLSENLCIKINVLGGNNILDPQGRFVTVQQPFVFLGADVT	597
	.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600	
eIF2C2	HPPAGDGKKPSINAVVGSMDAHPSRYCATVRVQERQEIIDLESMVRELLIQPYKSTRFKPTRIIFYRDGVFEGQFQGLHSELLAIRACIKLEKDYQ	700
eIF2C1	HPPAGDGKKPSINAVVGSMDAHPSRYCATVRVQERQEIIDLESMVRELLIQPYKSTRFKPTRIIFYRDGVFEGQFQGLHSELLAIRACIKLEKDYQ	697
	.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700	
eIF2C2	PGITSLVVQKRNHTRLFCADKHERVCKSGNIPAGTTVDTHITHPTFDFYLCSHAGIQGTSRPSHYEVLWDDNRFSEDELQILTYQLCHTYVCTRSVSI	800
eIF2C1	PGITSLVVQKRNHTRLFCADKHERVCKSGNIPAGTTVDTHITHPTFDFYLCSHAGIQGTSRPSHYEVLWDDNRFSEDELQILTYQLCHTYVCTRSVSI	797
	.....710.....720.....730.....740.....750.....760.....770.....780.....790.....800	
eIF2C2	PAPAYTAELVAFRARYHLVDKEDSAGESESGQSNORDQALAKAVQVHQDTLRTMYFA	860
eIF2C1	PAPAYTAELVAFRARYHLVDKEDSAGESESGQSNORDQALAKAVQVHQDTLRTMYFA	857
	.....810.....820.....830.....840.....850.....860	

■ eIF2C2 peptides  
■ oxidized

■ eIF2C1 peptides  
■ oxidized

— PAZ domain  
— PIWI domain



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Martinez et al. Figure 14

## &gt;eIF2C1, predicted protein sequence

MEAGPSGAAAGAYLPPLQQVFQAPRRPGIGTVGKPIKLLANYFEVDIPKIDVYHYEVDIKPD  
 KCPRRVNREVVEYMQHFQKQIFGDRKPVYDGKKNIYTVTALPIGNERVDFEVTIPGEGKDR  
 IFKVSIKWLAIVSWRMLHEALVSGQIPVPLESVQALDVAMRHLASMRYPVGRSFFSPPEGY  
 YHPLGGGREVWFGFHQSVRPAMWKMLNIDVSATAFYKAQPVIEFMCEVLDIRNIDEQPKPL  
 TDSQRVRFTKEIKGLKVEVTHCGQMCRKYRVCNVTRRPASHQTFPLQLESGQTVECTVAQYF  
 KQKYNLQLKYPHLPCLQVGQEQKHTYLPLEVCNIVAGQRCIKKLTNDQSTMIKATARSAPD  
 RQEEISRMLKNASYNLDPYIQEFGIKVKDDMTVEVTGRVLPAPILQYGGRNRAIATPNQGVWD  
 MRGKQFYNGIEIKVWAIACFAPQKQCREEVLKNTDQLRKISKDAGMPIQGQPCFCKYAQGA  
 DSVEPMFRHLKNTYSGLQLIIVILPGKTPVYAEVKRVGDTLLGMATQCVQVKNVVKTSPTL  
 SNLCLKINVKLGGINNILVPHQRSVVFQPVIFLGADVTHPPAGDGKKPSITAVVGSMDAHP  
 SRYCATVRVQRQEIIEDLSYMVRELLIQFYKSTRFKPTRIIFYRDGVPEGQLPQILHYEL  
 LAIRDACIKLEKDYQPGITYIVVQKRHHTRLFCADKNERIGKSGNIPAGTTVDNTIHPFEF  
 DFYLCSHAGIQGTSRPSHYVWLWDDNRFADDELQILTYQLCHTYVRCTRSVSIAPAYYARL  
 VAFRARYHLVDKEHDSGEGSHISGQSNGRDPQALAKAVQVHQDTLRTMYFA

## &gt;eIF2C2, predicted protein sequence

MGVLSAIPALAPPAPPPPIQGYAFKPPRPDFGTSGRTIKLQANFFEMDIPKIDIHYELDI  
 KPEKCPRRVNREIVEHMQHFQKQIFGDRKPVFDGRKNLYTAMPLPIGRDKVELEVTLPGEG  
 KDRIFKVSIIKWVSLQALHDALSGRPLPSVFPFETIQALDVVMRHLPSMRYPVGRSFFTAS  
 EGCSNPLGGGREVWFGFHQSVRPSLWKMLNIDVSATAFYKAQPVIEFVCEVLDFKSIIEEQQ  
 KPLTDSQRVKFTKEIKGLKVEITHCGQMCRKYRVCNVTRRPASHQTFPLQLESGQTVECTVA  
 QYFKDRHKLVLRYPHLPCLQVGQEQKHTYLPLEVCNIVAGQRCIKKLTNDQSTMIKATARS  
 APDRQEEISKLMRSASFNTDPYVREFGIMVKDEMTDVTGRVLPQPSILYGGRNKAIATPVQG  
 VWDMRNKQFHTGIEIKVWAIACFAPQRCQTEVHLKSFTEQLRKISR DAGMPIQGQPCFCKYA  
 QGADSVEPMFRHLKNTYAGLQLVVVILPGKTPVYAEVKRVGDTVLGMATQCVQMKNVQRTTP  
 QTLNCLKINVKLGGINNILLPQGRPPVFPVIFLGADVTHPPAGDGKKPSIAAVVGSMD  
 AHPNRYCATVRVQQHRQEIIQDLAAMVRELLIQFYKSTRFKPTRIIFYRDGVSEGQFQQVLH  
 HELLAIREACIKLEKDYQPGITFIVVQKRHHTRLFCTDKNERVGKSGNIPAGTTVDTKITHP  
 TEFDYLCSHAGIQGTSRPSHYVWLWDDNRFSSDELQILTYQLCHTYVRCTRSVSIAPAYY  
 AHLVAFRARYHLVDKEHDSAEGSHTSGQSNGRDHQALAKAVQVHQDTLRTMYFA

## &gt;eIF2C3, predicted protein sequence

SRSRVPVPGPGAAAAPCAPASPRRHPSANIPEIKRYAAAAAAGPGAGGAGDRGEAAPAA  
 AMEALGPGPPASLFQPPRRPGLGTGKPIRLLANHFQVQIPKIDVYHYDVIDKPEKRRRVN  
 REVVDTMVRHFQKQIFGDRQPGYDGKRNMYTAHPLPIGRDRVDMEVTLPGEGKDQTFKVSQ  
 WVSVSLQLLLEALAGHLNEVPDDSVQALDVITRHLPSMRYPVGRSFFSPPEGYYHPLGGG  
 REVWFGFHQSVRPAMWNMLNIDVSATAFYRAQPIIEFMCEVLDIQNEQTKPLTDSQRVK  
 FTKEIRGLKVEVTHCGQMCRKYRVCNVTRRPASHQTFPLQLENGQAMECTVAQYFKQKYSQ  
 LKYPHLPCLQVGQEQKHTYLPLEVCNIVAGQRCIKKLTNDQSTMIKATARSAPDRQEEISR  
 LVKSNMVGPPDPYLKEFGIVVHNEMTELTGRVLPAPMLQYGGRNKTVATPNQGVWDMRGKQ  
 FYAGIEIKVWAVACFAPQKQCREDLKSFDTQLRKISKDAGMPIQGQPCFCKYAQGADSVEP  
 MFKHLKMTYVGLQLIVVILPGKTPVYAEVKRVGDTLLGMATQCVQVKNVVKTSPTLSNLCL  
 KINAKLGGINNVLVPHQRPSVFPVIFLGADVTHPPAGDGKKPSIAAVVGSMDGHPSTRYCA  
 TVRVQTSRQEISQELLYSQEVIQDLTNMVRELLIQFYKSTRFKPTRIIYYRGGVSEGQMKQV  
 AWPELIAIRKACISLEEDYRPGITYIVVQKRHHTRLFCADKTERVGKSGNVAGTTVDSTIT  
 HPSEFDYLCSHAGIQGTSRPSHYQVLWDDNCFADDELQLLTYQLCHTYVRCTRSVSIAPA  
 YARLVAFRARYHLVDKDHDHSAEGSHVSGQSNGRDPQALAKAVQIHHDTHQHTMYFA



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Martinez et al. Figure 14

&gt;eIF2C4, predicted protein sequence

AGPAGAQPLLMVPRRPGYGTMGKPIKLLANCFQVEIPKIDVYLYEVDIKPDKCPRRVNREV  
 DSMVQHFKVTIFGDRRPVYDGKRSLYTANPLPVATTGVLDVTLPGEGGKDRPFKVSIFKVS  
 RVSWHLLHEVLTGRTLPEPLELDKPISTNPVHAVDVVLRHLPSMKYTPVGRSFFSAPEGYDH  
 PLGGGREVWFGFHQSVRPAMWKMLNIDVSATAFYKAQPVIQFMCEVLDIHNIDEQPRPLTD  
 SHRVKFTKEIKGLKVEVTHCGTMRRKYRVCNVTRRPASHQTFPLQLENGQTVERTVAQYFRE  
 KYTLQQLKYPHLPCLQVGQEQKHTYLPLEVNCIVAGQRCIKKLTNDQTSTMIKATARSAPDRQ  
 EEISRLVRSANYETDPFVQEFQFKVRDEMAHVTGRVLPAPMLQYGGNRNTVATPSHGVWDMR  
 GKQFHTGVEIKMWAIACFATQRQCREEILKGFTDQLRKISKDAGMPIQGQPCFCKYAQGADS  
 VEPMFRHLKNTYSGLQLIIVILPGKTPVYAEVKRVGDTLLGMATQCVQVKNIKTSPQTLN  
 LCLKINVKLGGINNILVPHQRPSVFQQPVIIFLGADVTHPPAGDGKKPSIAAVVGSMDAHP  
 YCATVRVQRPRQEI IQDLASMVRELLIQFYKSTRFKPTRIIFYRDGVSEGQFRQVLYYELLA  
 IREACISLEKDYQPGITYIVVQKRHHTRLEFCADTERVGRSGNI PAGTTVDTDITHPYEFD  
 YLCSHAGIQGTSRPSHYHVLWDDNCFTADELQLLTYQLCHTYVRCTRSVSIPAPAYYAH  
 LVA FRARYHLVDKEHDSAEGSHVSGQSNGRDPQALAKAVQIHQDTLRTMYFA

&gt;HILI, predicted protein sequence

ISSGDAGSTFMERGVKNQDFMDLSICTREKLAHVRNCKTGSSGIPVKLVTNLFNLDFFQDW  
 QLYQYHVITYIPDLASRLRIALLYSHSELSNKAFAFDGAILFLSQKLEEKVTELSSETQRGE  
 TIKMTITLRELPSSSPVCIQVFNIIFRKILKLSMYQIGRNFYNPSEPMEIPQHKLSLWGP  
 FAISVSYFERKLLFSADVSYKVLARNETVLEFMTALCQRTGLSCFTQTCEKQLIGLIVLTRYN  
 NRTYSIDDIDWSVKPHTHTFQKRDGTEITYVDYKQYDITVSDLNQPMVLVSLKKKRNDNSE  
 AQLAHLIPELCLTGLTDQATSDFQLMKAVAETRLSPSGRQQLARLVNDNIQRNTNARFEL  
 ETWGLHFGSQISLTGRIVPSEKILMQDHICQPVSAADWSKDIRTCKILNAQSLNTWLIILCSD  
 RTEYVAESFLNCLRRVAGSMGFNVMCILPSNQKTYYDSIKKYLSSDCPVPSQCVLARTLNKQ  
 GMMMSIATKIAMQMTCKLGGELWAVEIPLKSLMVVGIDVCKDALSKDVMVVGCVASVNPRIT  
 RWF SRCILQRTMTDADCLKVFMGTALNKWKYNHDLPARIIYRAGVGDGQLKTLIEYEVP  
 QLLSSVAESSSNTSSRLSVIVVRKKCMRPF FTEMNRTVQNPPLGTVDSEATRNEWQYDFYL  
 ISQVACRGTVSPTYYNVIYDDNGLKPDHMQRLTFKLCHLYYNWPGIVSVAPACQYAHKLTF  
 VAQSIHKEPSLELANHLFYL

&gt;HIWI, predicted protein sequence

MTGRARARARGRARGQETAQLVGSTASQQPGYIQPRPQPPPAEGELFGRGRQRGTAGGTAKS  
 QGLQISAGFQELSLAERGRRRDFHDLGVNTRQNLDHVKESKTGSSGIIVRLSTNHFRLTSR  
 PQWALYQYHIDYNPLMEARRLSALLFQHEDLIGKCHAFDGTILFLPKRLQQKVTEVFSKTR  
 NGEDVRITITLTNELPPTSPTCLQFYNIIFRRLKIMNLQQIGRNYNPNPDIDIPSHRLVI  
 WPGFTTSILQYENSIMLCTDVSHKVLRSSETVLDVDFMNFYHQTEEHKFQEQVSKELIGLVVLT  
 KYNNKTYRVDIDWDQNPKSTFFKADGSEVSFLEYRKYQNQEITDLKQPVLSQPKRRRGP  
 GGTLPGPAMLIPELCYLTGLTDKMRNDFNVMKDLAVHTRLTPEQRQREVGRLLIDYIHKNDNV  
 QREL RDWGLSFD SNLLSFSGRILQTEKIHQGGKTFDYNPQFADWSKETRGAPLISVKPLDNW  
 LLIYTRRNYEAANS LIQNLFKVT PAMGMQMRKAIMIEVDDRTEAYLRVLQQKV TADTQIVVC  
 LLSSNRKDKYDAIKKYLCTDCPTPSQCVVARTLGKQQTVMATKIALQMNCKMGGELWRVD  
 IPLKLVMIVGIDCYHDMTAGRRSIAGFVASINEGMTRWFSRCIFQDRGQELVDGLKVCLQAA  
 LRAWNSCNEYMP SRIIVYRDGVGDGQLKTLVNYEVPQFLDCLKSIGRGYNPRLTVIVVKRV  
 NTRFFAQSGGRLQNPLPGTVIDVEVTRPEWYDFFIVSQAVRSGSVSPHTYNNVIYDNSGLKPD  
 HIQRLTYKLCHIYNNWPGVIRVPAPCQYAHKLAFLVGQSIHREP NLSLSNRLYYL



aIF2C3	-----	100
aIF2C4	-----	34
aIF2C1	-----	45
aIF2C2	-----	48
HILI	-----	24
HWI	-----	89
ruler	1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100	
aIF2C3	-----	191
aIF2C4	-----	126
aIF2C1	-----	136
aIF2C2	-----	139
HILI	-----	124
HWI	-----	189
ruler	.....110.....120.....130.....140.....150.....160.....170.....180.....190.....200	
aIF2C3	-----	282
aIF2C4	-----	225
aIF2C1	-----	227
aIF2C2	-----	230
HILI	-----	213
HWI	-----	278
ruler	.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300	
aIF2C3	-----	382
aIF2C4	-----	325
aIF2C1	-----	327
aIF2C2	-----	330
HILI	-----	298
HWI	-----	363
ruler	.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400	
aIF2C3	-----	474
aIF2C4	-----	415
aIF2C1	-----	417
aIF2C2	-----	420
HILI	-----	396
HWI	-----	463
ruler	.....410.....420.....430.....440.....450.....460.....470.....480.....490.....500	
aIF2C3	-----	573
aIF2C4	-----	514
aIF2C1	-----	516
aIF2C2	-----	519
HILI	-----	459
HWI	-----	557
ruler	.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600	
aIF2C3	-----	671
aIF2C4	-----	612
aIF2C1	-----	614
aIF2C2	-----	617
HILI	-----	551
HWI	-----	649
ruler	.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700	
aIF2C3	-----	771
aIF2C4	-----	702
aIF2C1	-----	704
aIF2C2	-----	707
HILI	-----	641
HWI	-----	739
ruler	.....710.....720.....730.....740.....750.....760.....770.....780.....790.....800	
aIF2C3	-----	870
aIF2C4	-----	801
aIF2C1	-----	803
aIF2C2	-----	806
HILI	-----	737
HWI	-----	834
ruler	.....810.....820.....830.....840.....850.....860.....870.....880.....890.....900	
aIF2C3	-----	924
aIF2C4	-----	855
aIF2C1	-----	857
aIF2C2	-----	860
HILI	-----	764
HWI	-----	861
ruler	.....910.....920.....930.....940.....950.....	



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Martinez et al. Figure 16

>eIF2C1, cDNA sequence of predicted ORF

ATGGAAGCGGGACCCCTCGGGAGCAGCTGCGGGCGCTTACCTGCCCCCCTGCAGCAGGTGTT  
 CCAGGCACCTCGCCGGCCTGGCATTGGCACTGTGGGAAACCAATCAAGCTCCTGGCCAATT  
 ACTTTGAGGTGGACATCCCTAAGATCGACGTGTACCACTACGAGGTGGACATCAAGCCGGAT  
 AAGTGTCCCCGTAGAGTCAACCGGGAAGTGGTGAATACATGGTCCAGCATTTCAAGCCTCA  
 GATCTTTGGTGATCGCAAGCCTGTGTATGATGGAAAGAAGAACATTTACACTGTCACAGCAC  
 TGCCCATTTGGCAACGAACGGGTGCGACTTTGAGGTGACAATCCCTGGGGAAGGGAAGGATCGA  
 ATCTTTAAGGTCTCCATCAAGTGGCTAGCCATTGTGAGCTGGCGAATGCTGCATGAGGCCCT  
 GGTCAGCGGCCAGATCCCTGTTCCCTTGGAGTCTGTGCAAGCCCTGGATGTGGCCATGAGGC  
 AACTGGCATCCATGAGGTACACCCCTGTGGGCCGCTCCTTCTTCTCACC GCCTGAGGGCTAC  
 TACCACCCGCTGGGGGGTGGGCGCGAGGTCTGGTTCGGCTTTTACCAGTCTGTGCGCCCTGC  
 CATGTGGAAGATGATGCTCAACATTGATGTCTCAGCCACTGCCTTTTATAAGGCACAGCCAG  
 TGATTGAGTTCATGTGTGAGGTGCTGGACATCAGGAACATAGATGAGCAGCCCAAGCCCCCTC  
 ACGGACTCTCAGCGCGTTTCGCTTCACCAAGGAGATCAAGGGCCTGAAGGTGGAAGTCACCCA  
 CTGTGGACAGATGAAGAGGAAGTACCGCGTGTGTAATGTTACCCGTCGCCCTGCTAGCCATC  
 AGACATTCCCCTTACAGCTGGAGAGTGGACAGACTGTGGAGTGCACAGTGGCACAGTATTTTC  
 AAGCAGAAATATAACCTTCAGTCAAGTATCCCCATCTGCCCTGCCTACAAGTTGGCCAGGA  
 ACAAAGCATACCTACCTTCCCTTAGAGGTCTGTTAACATTGTGGCTGGGCAGCGCTGTATTA  
 AAAAGCTGACCGACAACCAGACCTCGACCATGATAAAGGCCACAGCTAGATCCGCTCCAGAC  
 AGACAGGAGGAGATCAGTCGCCTGATGAAGAATGCCAGCTACAACCTAGATCCCTACATCCA  
 GGAATTTGGGATCAAAGTGAAGGATGACATGACGGAGGTGACAGGGCGAGTGTGCTGCCGGCGC  
 CCATCTTGCAGTACGGCGGGCCGGAACCGGGCCATTGCCACACCCAATCAGGGTGTCTGGGAC  
 ATGCGGGGGGAAACAGTTCTACAATGGGATTGAGATCAAAGTCTGGGGCCATCGCCTGCTTCCG  
 ACCCAAAAACAGTGTGAGAGAGGTGCTCAAGAACTTCACAGACCAGCTGCGGAAGATTT  
 CCAAGGATGCGGGGATGCCTATCCAGGGTCAACCTTGTTTCTGCAAAATATGCACAGGGGGCA  
 GACAGCGTGGAGCCTATGTTCCGGCATCTCAAGAACACCTACTCAGGGCTGCAGCTCATTAT  
 TGTCATCCTGCCAGGGAAGACGCCGGTGTATGCTGAGGTGAAACGTGTCGGAGATACACTCT  
 TGGAATGGCTACGCAGTGTGTGAGGTGAAGAACGTGGTCAAGACCTCACCTCAGACTCTG  
 TCCAACCTCTGCCTCAAGATCAATGTCAAACCTTGGTGGCATTAAACAACATCCTAGTCCACA  
 CCAGCGCTCTGCCGTTTTTCAACAGCCAGTGATATTCTTGGGAGCAGATGTTACACACCCCC  
 CAGCAGGGGATGGGAAAAAACCTTCTATCACAGCAGTGGTAGGCAGTATGGATGCCCACCCC  
 AGCCGATACTGTGCTACTGTGCGGGTACAGCGACCACGGCAAGAGATCATTTGAAGACTTGTCT  
 CTACATGGTGCCTGAGCTCCTCATCCAATTCTACAAGTCCACCCGTTTCAAGCCTACCCGCA  
 TCATCTTCTACCGAGATGGGGTGCCTGAAGGCCAGCTACCCAGATACTCCACTATGAGCTA  
 CTGGCCATTTCGTGATGCCTGCATCAAACCTGGAAGGACTACCAGCCTGGGATCACTTATAT  
 TGTGGTGCAGAAACGCCATCACACCCGCCTTTTCTGTGCTGACAAGAATGAGCGAATTGGGA  
 AGAGTGGTAACATCCCAGCTGGGACCACAGTGGACACCAACATCACCCACCCATTGAGTTT  
 GACTTCTATCTGTGCAGCCACGCAGGCATCCAGGGCACCAGCCGACCATCCCATTTACTATGT  
 TCTTTGGGATGACAACCGTTTACAGCAGATGAGCTCCAGATCCTGACGTACCAGCTGTGCC  
 AACTTACGTACGATGCACACGCTCTGTCTCTATCCCAGCACCTGCCTACTATGCCCGCCTG  
 GTGGCTTTCGGGGCACGATACCACCTGGTGGACAAGGAGCATGACAGTGGAGAGGGGAGCCA  
 CATATCGGGGCAGAGCAATGGGCGGGACCCCGAGGCCCTGGCCAAAGCCGTGCAGGTTCACC  
 AGGATACTCTGCGCACCATGTACTTCGCT



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Martinez et al. Figure 16

>eIF2C2, cDNA sequence of predicted ORF  
ATGGGTGTTCTCTCTGCCATTCCCGCACTTGCACCTCCTGCGCCGCCGCCCCCATCCAAGG  
ATATGCCTTCAAGCCTCCACCTAGACCCGACTTTGGGACCTCCGGGAGAACAAATCAAATTAC  
AGGCCAATTTCTTCGAAATGGACATCCCCAAAATTGACATCTATCATTATGAATTGGATATC  
AAGCCAGAGAAGTGCCCGAGGAGAGTTAACAGGGAAATCGTGGAACACATGGTCCAGCACTT  
TAAAACACAGATCTTTGGGGATCGGAAGCCCGTGTGTTGACGGCAGGAAGAATCTATACACAG  
CCATGCCCCCTTCCGATTGGGAGGGACAAGGTGGAGCTGGAGGTACAGCTGCCAGGAGAAGGC  
AAGGATCGCATCTTCAAGGTGTCCATCAAGTGGGTGTCTGCGTGAGCTTGCAGGCGTTACA  
CGATGCACCTTTCAGGGCGGCTGCCCAGCGTCCCTTTTGAGACGATCCAGGCCCTGGACGTGG  
TCATGAGGCACTTGCCATCCATGAGGTACACCCCGTGGGCGGCTCCTTCTTACCAGCGTCC  
GAAGGCTGCTCTAACCCCTCTTGGCGGGGGCCGAGAAGTGTGGTTTGGCTTCCATCAGTCCGT  
CCGGCCTTCTCTCTGGAAATGATGCTGAATATTGATGTGTGTCAGCAACAGCGTTTACAAGG  
CACAGCCAGTAATCGAGTTTGTGTTGTGAAGTTTGGATTTTAAAAGTATTGAAGAACAACAA  
AAACCTCTGACAGATTCCCAAAGGGTAAAGTTTACCAAAGAAATTAAAGGTCTAAAGGTGGA  
GATAACGCACTGTGGGCAGATGAAGAGGAAGTACCGTGTCTGCAATGTGACCCGGCGGCCCG  
CCAGTCACCAAACATTCCCGCTGCAGCAGGAGAGCGGGCAGACGGTGGAGTGCACGGTGGCC  
CAGTATTTCAAGGACAGGCACAAGTTGGTTCTGCGCTACCCCCACCTCCCATGTTTACAAGT  
CGGACAGGAGCAGAAACACACCTACCTTCCCCTGGAGGTCTGTAACATTGTGGCAGGACAAA  
GATGTATTAAAAATTAAACGGACAATCAGACCTCAACCATGATCAGAGCAACTGCTAGGTCG  
GCGCCCGATCGGCAAGAAGAGATTAGCAAATTTGATGCGAAGTGCAGTTTCAACACAGATCC  
ATACGTCCGTGAATTTGGAATCATGGTCAAAGATGAGATGACAGACGTGACTGGGCGGGTGC  
TGCAGCCGCCCTCCATCCTCTACGGGGCAGGAATAAAGCTATTGCGACCCCTGTCCAGGGC  
GTCTGGGACATGCGGAACAAGCAGTTCCACACGGGCATCGAGATCAAGGTGTGGGCCATTGC  
GTGCTTCGCCCCCAGCGCCAGTGCACGGAAGTCCATCTGAAGTCTTACAGAGCAGCTCA  
GAAAGATCTCGAGAGACGCTGGCATGCCATCCAGGGCCAGCCGTGCTTCTGCAATACGCG  
CAGGGGGCGGACAGCGTGAGCCCATGTTCCGGCACCTGAAGAACACGTATGCGGGCCTGCA  
GCTGGTGGTGGTCATCCTGCCCAGCAAGACGCCCGTGTACGCCGAGGTCAAGCGCGTGGGAG  
ACACGGTGCTGGGGATGGCCACGCAGTGCCTGTCAGATGAAGAACGTGTCAGAGGACCACGCCA  
CAGACCCTGTCCAACCTTTGCCTGAAGATCAACGTCAAGCTGGGAGGCGTGAACAACATCCT  
GCTGCCCCAGGGCAGGCCGCCGGTGTTCAGCAGCCCGTCATCTTCTGGGAGCAGACGTCA  
CTACCCCCCGCCGGGGATGGGAAGAAGCCCTCCATTGCCGCCGTGGTGGGCAGCATGGAC  
GCCCACCCCAATCGCTACTGCGCCACCGTGCCTGTCAGCAGCACCAGGAGATCATACA  
AGACCTGGCCGCCATGGTCCGCGAGCTCCTCATCCAGTTCTACAAGTCCACGCGCTTCAAGC  
CCACCCGATCATCTTCTACCGCGACGGTGTCTCTGAAGGCCAGTTCCAGCAGGTTCTCCAC  
CACGAGTTGCTGGCCATCCGTGAGGCCTGTATCAAGCTAGAAAAAGACTACCAGCCCGGGAT  
CACCTTCATCGTGGTGCAGAAGAGGCACCACACCCGGCTCTTCTGCACTGACAAGAACGAGC  
GGGTTGGGAAAAGTGGAAACATTCCAGCAGGCACGACTGTGGACACGAAAATCACCCACCCC  
ACCGAGTTCGACTTCTACCTGTGTAGTCAAGCTGGCATCCAGGGGACAAGCAGGCCTTCGCA  
CTATCACGTCTCTGGGACGACAATCGTTTCTCCTCTGATGAGCTGCAGATCCTAACCTACC  
AGCTGTGTACACCTACGTGCGCTGCACACGCTCCGTGTCCATCCAGCGCCAGCATACCTAC  
GTCACCTGGTGGCCTTCCGGGCCAGGTACCACCTGGTGGATAAGGAACATGACAGTGTGA  
AGGAAGCCATACCTCTGGGCAGAGTAACGGGCGAGACCACCAAGCACTGGCCAAGGCGGTCC  
AGGTTACCAAGACACTCTGCGCACCATGTACTTTGCT







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Martinez et al. Figure 16

>eIF2C4, cDNA sequence of predicted ORF  
GCAGGACCCGCTGGGGCCCAGCCCCCTACTCATGGTGCCGAGAACCTGGCTATGGCACCAT  
GGGCAAACCCATTAAACTGCTGGCTAACTGTTTTCAAGTTGAAATCCCAAAGATTGATGTCT  
ACCTCTATGAGGTAGATATTAAACCAGACAAGTGTCTTAGGAGAGTGAACAGGGAGGTGGTT  
GACTCAATGGTTTACGATTTTTAAAGTAACATATTTGGAGACCGTAGACCAGTTTATGATGG  
AAAAAGAAGTCTTTACACCGCCAATCCACTTCCTGTGGCAACTACAGGGGTAGATTTAGACG  
TTACTTTTACCTGGGGAAGGTGGAAGATCGACCTTTCAAGGTGTCAATCAAATTTGTCTCT  
CGGGTGAGTTGGCACCTACTGCATGAAGTACTGACAGGACGGACCTTGCTGAGCCACTGGA  
ATTAGACAAGCCAATCAGCACTAACCTGTCCATGCCGTTGATGTGGTGCTACGACATCTGC  
CCTCCATGAAATACACACCTGTGGGGCGTTTCTCCGCTCCAGAAGGATATGACCAC  
CCTCTGGGAGGGGGCAGGGAAGTGTGGTTTGGATTCCATCAGTCTGTTCCGGCTGCCATGTG  
GAAAAATGATGCTTAATATCGATGTTTCTGCCACTGCCCTTCTACAAAGCACAACCTGTAATTC  
AGTTCATGTGTGAAGTTCTTGATATTCATAATATTGATGAGCAACCAAGACCTCTGACTGAT  
TCTCATCGGGTAAAATTCACCAAAGAGATAAAAGGTTTGAAGGTTGAAGTGAAGTCAATTGTGG  
AACAATGAGACGGAAATACCGTGTGTAATGTAACAAGGAGGCCTGCCAGTCATCAAACCT  
TTCTTTTACAGTTAGAAAACGGCCAAACTGTGGAGAGAACAGTAGCGCAGTATTPCAGAGAA  
AAGTATACTCTTCAGCTGAAGTACCCGCACCTTCCCTGTCTGCAAGTCGGGCAGGAACAGAA  
ACACACCTACCTGCCACTAGAAGTCTGTAATATTGTGGCAGGGCAACGATGTATCAAGAAGC  
TAACAGACAAATCAGACTTCCACTATGATCAAGGCAACAGCAAGATCTGCACCAGATAGACAA  
GAGGAAATTAGCAGATTGGTAAGAAGTGCAAAATTTATGAAACAGATCCATTTGTTTCAGGAGTT  
TCAATTTAAAGTTCGGGATGAAATGGCTCATGTAAGTGGACGCGTACTTCCAGCACCTATGC  
TCCAGTATGGAGGACGGAATCGGACAGTAGCAACACCGAGCCATGGAGTATGGGACATGCCA  
GGGAAACAATTCACACAGGAGTTGAAATCAAAATGTGGGCTATCGCTTGTGTTTGGCACACA  
GAGGCAGTGCAGAGAAGAAATATTGAAGGGTTTCACAGACCAGCTGCGTAAGATTTCTAAGG  
ATGCAGGGATGCCCATCCAGGGCCAGCCATGCTTCTGCAAAATATGCACAGGGGGCAGACAGC  
GTAGAGCCCATGTTCCGGCATCTCAAGAACACATATTCTGGCCTACAGCTTATTATCGTCAT  
CCTGCCCGGGGAAGACACCAGTGTATGCGGAAGTGAAACGTGTAGGAGACACACTTTTGGGTA  
TGGCTACACAATGTGTTCAAGTCAAGAATGTAATAAAAAACATCTCCTCAAACCTCTGTCAAAC  
TTGTGCCTAAAGATAAATGTTAACTCGGAGGGATCAATAATATTCTTGTACCTCATCAAAG  
ACCTTCTGTGTTCCAGCAACCAGTGATCTTTTTTGGGAGCCGATGTCACTCATCCACCTGCTG  
GTGATGGAAAAGAAGCCTTCTATTGCTGCTGTTGTAGGTAGTATGGATGCACACCCAAGCAGA  
TACTGTGCCACAGTAAGAGTTTCAAGACCCCCGACAGGAGATCATCCAGGACTTGGCCTCCAT  
GGTCCGGGAACCTTCTTATTCAATTTTATAAGTCAACTCGGTTCAAGCCTACTCGTATCATCT  
TTTATCGGGATGGTGTGTTTCAAGAGGGGCAGTTTAGGCAGGTATTATATTATGAACCTACTAGCA  
ATTTCGAGAAGCCTGCATCAGTTTGGAGAAAGACTATCAACCTGGAATAACCTACATTGTAGT  
TCAGAAGAGACATCACACTCGATTATTTTGTGCTGATAGGACAGAAAGGGTTGGAAGAAGTG  
GCAATATCCCAGCTGGAACAACAGTTGATACAGACATTACACACCCATATGAGTTTCGATTTT  
TACCTCTGTAGCCATGCTGGAATACAGGGTACCAGTCGTCCCTCACACTATCATGTTTTATG  
GGATGATAACTGCTTTACTGCAGATGAAGTTTCAAGTGTAACTTACCAGCTCTGCCACACTT  
ACGTACGCTGTACACGATCTGTTTCTATACCTGCACCAGCGTATTATGCTCACCTGGTAGCA  
TTTAGAGCCAGATATCATCTTGTGGACAAAGAATGACAGTGTGAAGGAAGTCACGTTTC  
AGGACAAAGCAATGGGCGAGATCCACAAGCTCTTGCCAAGGCTGTACAGATTCACCAAGATA  
CCTTACGCACAATGTACTTCGCTTAA



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Martinez et al. Figure 16

>HILI, cDNA sequence of predicted ORF  
ATATCTTCTGGTGATGCTGGAAGTACCTTCATGGAAAGAGGTGTGAAAAACAAACAGGACTT  
TATGGATTTGAGTATCTGTACCAGAGAAAAATTGGCACATGTGAGAAATTGTAAAAACAGGTT  
CCAGTGGAATACCTGTGAAACTGGTTACAAACCTCTTTAACTTAGATTTTCCCCAAGACTGG  
CAGCTATACCAGTACCATGTGACATATATTCAGATTTAGCATCTAGAAGGCTGAGAATTGC  
TTTACTTTTATAGTCATAGTGAACCTTCCAAACAAAGCAAAAGCATTTCGACGGTGCCATCCTTT  
TTCTGTCACAAAAGCTAGAAGAAAAGGTCACAGAGTTGTCAAGTGAAACTCAAAGAGGTGAG  
ACTATAAAGATGACTATCACCTGAAGAGGGAGCTGCCATCAAGTTCTCCCGTGTGCATCCA  
GGTCTTCAATATCATCTTCAGAAAGATCCTCAAAAAGTTGTCCATGTACCAAATTGGACGGA  
ACTTCTATAATCCTTCAGAGCCAATGGAAATCCCCAGCACAAATTATCCCTTTGGCCTGGG  
TTTGCCATTTCTGTGTCATATTTTGAAAGGAAGCTCCTGTTTAGTGCTGATGTGAGTTACAA  
AGTCCTCCGGAATGAGACGGTTCTGGAATTCATGACTGCTCTCTGTCAAAGAAGTGGCTTGT  
CCTGTTTCACCCAGACGTGTGAGAAGCAGCTAATAGGGCTCATTGTCTTACAAGATACAAT  
AACAGAACCTACTCCATTGATGACATTGACTGGTCAGTGAAGCCACACACACCTTTCAGAA  
GCGGGATGGCACCAGATCACCTATGTGGATTACTACAAGCAGCAGTATGATATTACTGTAT  
CGGACCTGAATCAGCCCATGCTTGTTAGTCTGTTAAAGAAGAAGAGAAATGACAACAGTGAG  
GCTCAGCTCGCCACCTGATACCTGAGCTCTGCTTTCTAACAGGGCTGACTGACCAGGCAAC  
ATCTGATTTCCAGCTGATGAAGGCTGTGGCTGAAAAGACACGTCTCAGTCCTTCAGGCCGGC  
AGCAGCGCCTGGCCAGGCTTGTGGACAACATCCAGAGGAATACCAATGCTCGCTTTGAACATA  
GAGACCTGGGGACTGCATTTTGAAGCCAGATATCTCTGACTGGCCGGATTGTGCCTTCAGA  
AAAAATATTAATGCAAGACCACATATGTCAACCTGTGTCTGCTGCTGACTGGTCCAAGGATA  
TTCGAACCTGCAAGATTTTAAATGCACAGTCTTTGAATACCTGGTTGATTTTATGTAGCGAC  
AGAAGTGAATATGTTGCCGAGAGCTTTCTGAAGTCTTGAGAAGAGTTGCAGGTTCCATGGG  
ATTTAATGTAATGTGCATTTCTGCCTTCTAATCAGAAGACCTATTATGATTCCATTAAAAAAT  
ATTTGAGCTCAGACTGCCAGTCCCAAGCCAATGTGTGCTTGCTCGGACCTTGAATAAACAG  
GGCATGATGATGAGTATCGCCACCAAGATCGCTATGCAGATGACTTGCAAGCTCGGAGGCGA  
GCTGTGGGCTGTGGAATACCTTTAAAGTCCCTGATGGTGGTGGTATGATGTCTGTAAAG  
ATGCACTCAGCAAGGACGTGATGGTTGTTGGATGCGTGGCCAGTGTTAACCCAGAATCACC  
AGGTGGTTTTTCCCGCTGTATCCTTCAGAGAACAATGACTGATGTTGCAGATTGCTTGAAAGT  
TTTCATGACTGGAGCACTCAACAAATGGTACAAGTACAATCATGATTTGCCAGCACGGATAA  
TTGTGTACCGTGCTGGTGTAGGGGATGGTCAGCTGAAAACACTTATTGAATATGAAGTCCCA  
CAGCTGCTGAGCAGTGTGGCAGAATCCAGCTCAAATACCAGCTCAAGACTGTCGGTGATTGT  
GGTCAGGAAGAAGTGCATGCCACGATTCCTTACCAGAAATGAACCGCACTGTACAGAACCCCC  
CACTTGGCACTGTTGTGGATTTCAGAAGCAACACGTAACGAATGGCAGTATGACTTTTATCTG  
ATCAGCCAGGTGGCCTGCCGGGGAACTGTTAGTCCTACCTACTATAATGTCATCTATGATGA  
CAACGGCTTGAAGCCCCGACCATATGCAGAGACTTACATTCAAATTGTGCCACCTGTACTACA  
ACTGGCCGGGCATAGTCAGTGTCCAGCACCATGTCAGTATGCTCACAAGCTGACCTTTCTG  
GTGGCACAAGCATTTCATAAAGAACCCAGTCTGGAATTAGCCAACCATCTCTTCTACCTG



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Martinez et al. Figure 16

>HIWI, cDNA sequence of predicted ORF  
ATGACTGGGAGAGCCCGAGCCAGAGCCAGAGGAAGGGCCCGGGTCAGGAGACAGCGCAGCT  
GGTGGGCTCCACTGCCAGTCAGCAACCTGGTTATATTACGCTAGGCCTCAGCCGCCACCAG  
CAGAGGGGGAATTATTTGGCCGTGGACGGCAGAGAGGAACAGCAGGAGGAACAGCCAAAGTCA  
CAAGGACTCCAGATATCTGCTGGATTTTCAGGAGTTATCGTTAGCAGAGAGAGGAGGTCGTCTG  
TAGAGATTTTCATGATCTTGGTGTGAATACAAGGCAGAACCTAGACCATGTTAAAGAATCAA  
AAACAGGTTCTTCAGGCATTATAGTAAGGTTAAGCACTAACCATTTCCGGCTGACATCCCGT  
CCCCAGTGGGCCTTATATCAGTATCACATTGACTATAACCCACTGATGGAAGCCAGAAGACT  
CCGTTTCAGCTCTTCTTTTCAACACGAAGATCTAATTGGAAAGTGCCATGCTTTTGATGGAA  
CGATATTATTTTACCTAAAAGACTACAGCAAAAGGTTACTGAAGTTTTTAGTAAGACCCGG  
AATGGAGAGGATGTGAGGATAACGATCACTTTAACAATGAACCTCCACCTACATCACCAAC  
TTGTTTGCAGTTCTATAATATTATTTTCAGGAGGCTTTTGAAAATCATGAATTTGCAACAAA  
TTGGACGAAATTATTATAACCCAAATGACCCAATTGATATTCCAAGTCACAGGTTGGTGATT  
TGGCCTGGCTTCACTACTTCCATCCTTCAGTATGAAAACAGCATCATGCTCTGCACTGACGT  
TAGCCATAAAGTCCTTCAAGTGAGACTGTTTTGGATTTTCATGTTCAACTTTTATCATCAGA  
CAGAAGAACATAAATTTCAAGAACAAGTTTCCAAAGAACATAATAGGTTTAGTTGTTCTTACC  
AAGTATAACAATAAGACATACAGAGTGGATGATATTGACTGGGACCAGAATCCCAAGAGCAC  
CTTTAAGAAAGCCGACGGCTCTGAAGTCAGCTTCTTAGAATACTACAGGAAGCAATACAACC  
AAGAGATCACCGACTTGAAGCAGCCTGTCTTGGTTCAGCCAGCCCAAGAGAAGGCGGGCCCT  
GGGGGGACACTGCCAGGGCCTGCCATGCTCATTCCTGAGCTCTGCTATCTTACAGGTCTAAC  
TGATAAAATGCGTAATGATTTTAACTGATGAAAGACTTAGCCGTTTCATACAAGACTAACTC  
CAGAGCAAAGGCAGCGTGAAGTGGGACGACTCATGATTACATTCATAAAAACGATAATGTT  
CAAAGGGAGCTTCGAGACTGGGGTTTGAGCTTTGATTCCAACCTTACTGTCCTTCTCAGGAAG  
AATTTTGCAAACAGAAAAGATTACCAAGGTGGAAAAACATTTGATTACAATCCACAATTTG  
CAGATTGGTCCAAAGAAACAAGAGGTGCACCATTAATTAGTGTTAAGCCACTAGATAACTGG  
CTGTTGATCTATACGCGAAGAAATTATGAAGCAGCCAAATTCATTGATACAAAATCTATTTAA  
AGTTACACCAGCCATGGGCATGCAAATGAGAAAAAGCAATAATGATTGAAGTGATGACAGAA  
CTGAAGCCTACTTAAGAGTCTTACAGCAAAAGGTCACAGCAGACACCCAGATAGTTGTCTGT  
CTGTTGTCAAGTAATCGGAAGGACAAATACGATGCTATTAATAAATACCTGTGTACAGATTG  
CCCTACCCCAAGTCAGTGTGTGGTGGCCCGAACCTTAGGCCAAACAGCAAACCTGTCATGGCCA  
TTGCTACAAAGATTGCCCTACAGATGAACTGCAAGATGGGAGGAGAGCTCTGGAGGGTGGAC  
ATCCCCCTGAAGCTCGTGATGATCGTTGGCATCGATTGTTACCATGACATGACAGCTGGGCG  
GAGGTCAATCGCAGGATTTGTTGCCAGCATCAATGAAGGGATGACCCGCTGGTTCTCACGCT  
GCATATTTTCAGGATAGAGGACAGGAGCTGGTAGATGGGCTCAAAGTCTGCCTGCAAGCGGCT  
CTGAGGGCTTGGAATAGCTGCAATGAGTACATGCCAGCCGGATCATCGTGTACCGCGATGG  
CGTAGGAGACGGCCAGCTGAAAACACTGGTGAACACGAAGTGCCACAGTTTTTGGATTGTC  
TAAAATCCATTGGTAGAGGTTACAACCCTAGACTAACGGTAATTGTGGTGAAGAAAAGAGTG  
AACACCAGATTTTTTGGCTCAGTCTGGAGGAAGACTTCAGAATCCACTTCCTGGAACAGTTAT  
TGATGTAGAGGTTACCAGACCAGAATGGTATGACTTTTTTATCGTGAGCCAGGCTGTGAGAA  
GTGGTAGTGTTTCTCCACACATTACAATGTCATCTATGACAACAGCGGCTGAAGCCAGAC  
CACATACAGCGCTTGACCTACAAGCTGTGCCACATCTATTACAACCTGGCCAGGTGTCATTCTG  
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GAGAGCCAAATCTGTCACTGTCAAACCGCCTTTACTACCTC



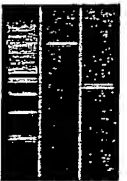

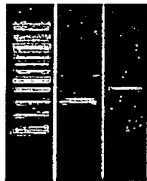


**A**

Gene name	1 <sup>st</sup> primer pair (5'-3')	2 <sup>nd</sup> primer pair (5'-3')	Expected length (bp)
eIF2C1	GAGGTCTGTAACATTGTGGC*	GAGGTCTGTAACATTGTGGC*	287
	CGGTAGAAGATGATGCGGGT	AAGTTCTTGAGCACCTCTTCTCGA	
	GAGGTCTGTAACATTGTGGC	CCACACCAGCGCTCTGCC	207
	CGGTAGAAGATGATGCGGGT	CTCACGCACCATGTAGGA	
eIF2C2	GAGGTCTGTAACATTGTGGC	ATCCTGCTGCCCCAAGGG	186
	CGGTAGAAGATGATGCGGGT	GATCTCCTGCCGGTGCTG	
	GAGGTCTGTAACATTGTGGC*	GAGGTCTGTAACATTGTGGC*	891
	CGGTAGAAGATGATGCGGGT	GATCTCCTGCCGGTGCTG	
eIF2C3	AGAGCAACAGTATGGTGGGTGGAC	CCTCTACAGTCAAGAGGT	334
	TGGATGTGTGATGGTACT*	TGGATGTGTGATGGTACT*	
	CACTTGAATGAAGTCCCA	AGAGCAACAGTATGGTGGGTGGAC	808
	TCCTGGATGACCTCTTGACTGTAG*	TCCTGGATGACCTCTTGACTGTAG*	
eIF2C4	TCCGGCATCTCAAGAACACATATTCT	ATCCAGGACTTGGCCTCC	324
	GAATCATATGGGTGTGTAATGTCTG*	GAATCATATGGGTGTGTAATGTCTG*	
HILI	CAGCACAAATTATCCCTT*	CAGCACAAATTATCCCTT*	264
	CGGCCTGAAGGACTGAGACGTGT	GTGTGTGGGCTTCACTGA	
	TCTCTGTCAAAGAACTGGCTTGTCTT*	TCTCTGTCAAAGAACTGGCTTGTCTT*	393
	CTGTACAGTGCGGTTTCAT	CGGCCTGAAGGACTGAGACGTGT	

\* primers used in both reactions (semi-nested PCR)

**B**

Gene name	eIF2C1		eIF2C2		eIF2C3		eIF2C4	HILI	
Expected length (bp)	287	207	186	891	808	334	324	264	393
PCR products									



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